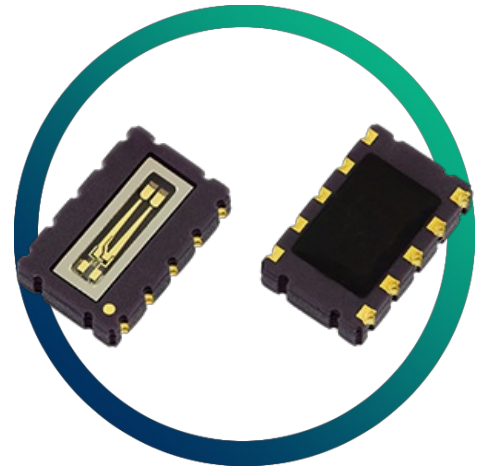


# RV-3049-C2

## RTC SPI Bus

- Temperature compensated accuracy
- AEC-Q200 compliant option
- Compliant with 4-wire SPI bus
- Backup battery input, alarm, timer and interrupt
- Previously named RV3049C2



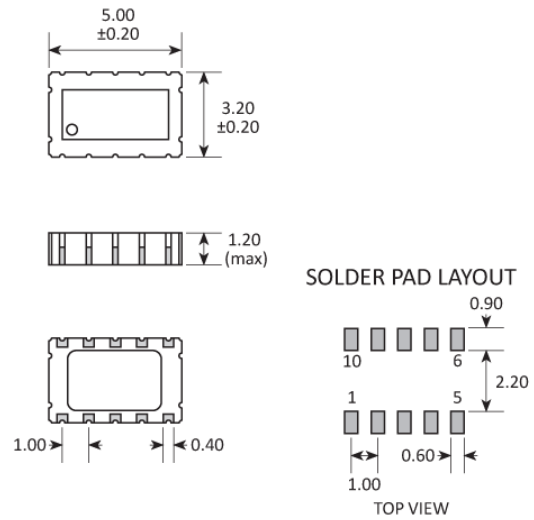
### CONFIGURABLE OPTIONS

Parameter	Option Code
<b>Time accuracy</b>	
Any	
±3ppm max (0.26s/day) @ 25 °C	
±6ppm max (0.52s/day), -40+85 °C	A
±25ppm max (2.17s/day), -40+85 °C	B
±8ppm max (0.70s/day), -40+125 °C	D
<b>Operating temperature range</b>	
Any	
-40 to +85 °C	
-40 to +125 °C	
<b>Qualification</b>	
Any	
Commercial	
AEC-Q200 (Automotive)	A

## SPECIFICATIONS

Frequencies (selectable)	32.768kHz, 1024Hz, 32Hz, 1Hz
Dimensions	5.0 x 3.2 x 1.2mm
Frequency tolerance @ 25°C	±10ppm typ, ±20ppm max
Storage temperature range	-55 to +125°C
Supply voltage (V <sub>DD</sub> )	SPI bus active 1.8 ~ 5.5V Time-keeping mode 1.3 ~ 5.5V
Supply current (V <sub>DD</sub> =3.0V)	0.80µA typ, 1.0µA max
Shock and vibration resistance	±5ppm, 5,000g, 0.3ms, ½ sine ±5ppm, 20g, 10.0 ~ 2,000Hz
Soldering condition	Reflow, 260°C, 20 sec max

## PACKAGE DRAWING



PAD	CONNECTION	PAD	CONNECTION
1	Supply (VDD)	6	Ground
2	Frequency output (CLKOUT)	7	Interrupt output (/INT)
3	Chip select (CS)	8	Backup supply
4	Serial clock input (SCL)	9	Serial data in (SDI)
5	Serial data out (SDO)	10	CLK output enable (CLKOE)

Dimensions in mm

## ORDERING INFORMATION

To request a quotation for the RV-3049-C2 please use the configurable options form to choose the options you require and then submit your configured product to our team. Our expert advisers are always happy to help with your requirements and can be contacted on +44 1460 256 100 or at [sales@golledge.com](mailto:sales@golledge.com).

Following product selection you will be issued with a seven character Golledge part number. Your Golledge part number is the internationally accepted Golledge manufacturing part number (MPN) that should be used for all project documentation, including bills of materials (BoMs) and purchase orders.

If you have any queries regarding any of our documentation our dedicated sales team will be happy to help.

## TECHNICAL RESOURCES

[RV-3049-Cx\\_App-Manual.pdf](#)

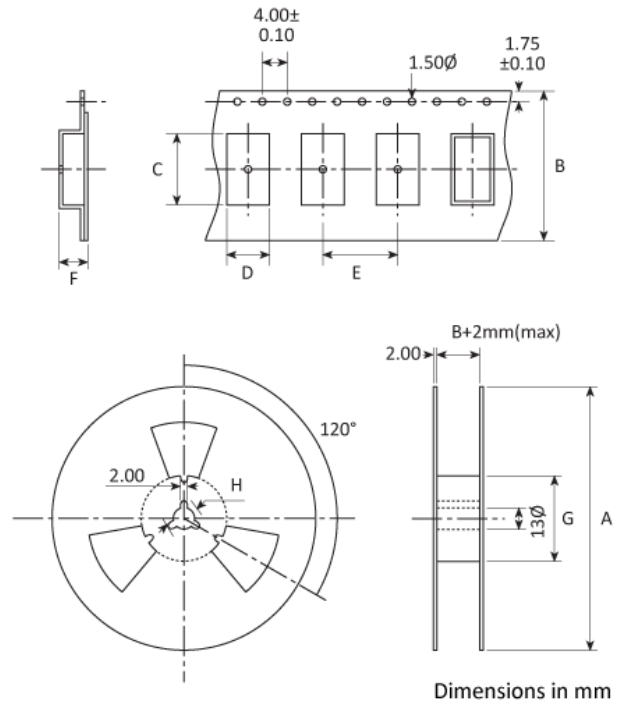
[RV-3049-C2\\_Development-Board.pdf](#)

**APPLICATIONS**

The RV-3049-C2 real time clock is a versatile component suitable for a wide range of applications and uses including:

- Automotive including car radio, GPS and other tracking systems, dashboard devices, tachometers, entertainment systems, and engine control
- Industrial and consumer electronics
- Metering including E-meter and heating counters
- Outdoor including ATM and POS systems, surveillance and safety systems, and ticketing systems
- Portable devices
- White goods

**TAPE & REEL SPECIFICATION**



A:178\* B:12 C:5.3 D:3.5 E:8 F:1.4 G:80 H:21

\*Larger reel size available. Please ask for details

**HANDLING & STORAGE**



Human Body Model (HBM) 1A (250V to <500V)





Moisture Sensitivity Level (MSL): 1 (or not applicable)


**CONSTRUCTION**


SON 10-pin ceramic package with glass lid


**COMPLIANCE**


 Lead-free (< 0.1% by weight)

 RoHS compliant with no exemptions. [See our declaration](#)

 REACH compliant. [See our statement](#)

 Free of conflict minerals. [See our declaration](#)

 Free of Halogens. [See our declaration](#)

 Free of Ozone-depleting substances. [See our declaration](#)

**SUPPLY PARTNER**



The RV-3049-C2 is manufactured by Microcrystal and stocked and supplied by Golledge.

**OTHER INFORMATION**

An evaluation/development board for the RV-3049-C2 is also available on request. Please contact our expert advisers at [sales@golledge.com](mailto:sales@golledge.com) for more information.

**BLOCK DIAGRAM**

